Serial No.: 10/530,138

1   **IN THE SPECIFICATION**

2   Please amend the specification as follows:

3   On page 12 of the specification, please delete line 8, as follows:

4   ~~Fig. 16 is illustrates some possible applications of the color naming methods.~~

5   Please replace the paragraph starting on line 16 of page 30 as follows:

6   It should be noted that while the foregoing methods and system can be used to attach

7   color names to individual pixels, samples of color, regions and objects in images and to

8   derive the description of color composition, they can be used in many other applications

9   involving manipulation with color values, color analysis and color naming in image

10   processing, video processing, visualization, computer graphics and human-machine

11   interaction. To start with, using color names to label regions can often improve the result

12   of image segmentation, since the neighboring regions that share the same color name can

13   be merged. In many cases color names only, or in combination with other features (such

14   as spatial attributes, boundary and size features), can provide valuable information about

15   the analyzed images and reveal their semantics. For example, ~~as illustrated in Fig 16a,~~ a

16   picture image having regions labeled vivid blue or vivid purplish blue found in the upper

17   part of the image, may represent sky on a bright sunny day. In the same picture regions

18   with regular boundaries/geometry and bright saturated colors are very likely to be

19   man-made objects. Similarly, the flowers shown in a picture ~~Figure 16b~~ can be easily

20   detected based on the relationships between the curvature and color of ~~the~~ say, a vivid

21   reddish purple region, and the neighboring green regions. Overall color composition, as

22   generated with the teachings of this invention, often captures the atmosphere in the scene.

23   For example, by combining the linguistic terms from the color name syntax described in

24   teachings of this invention, the scene shown in Figure 15b can be described as

25   "brownish", and easily related to a man-made environment. Another example of what can

Serial No.: 10/530,138

1   be accomplished by adding the color naming ability to the traditional image features (e.g.

2   regions, lines, texture, etc.). By merging all the descriptors, ~~as shown in Figure 16e,~~ it can

3   be easily concluded that ~~the~~ an image is very likely to be an outdoor scene, probably a

4   cityscape or a man-made structure seen from the large viewing distance. Assuming the

5   hypothesis is correct, a step further would be to conclude "the weather wasn't really nice

6   when the picture was taken". Color naming ability may be implemented as a part of

7   Artificial Intelligence Systems. For example it is also within a scope of these teachings to

8   manipulate a robot by naming and describing the objects it should pick from the

9   production line. In such a case a digital image robot receives would be subjected to the

10 processing shown in Figure 10, and the spatial location of the named color within the

11 digital image, would be remapped to the actual physical location on the production line.

12

DOCKET NUMBER: YOR920020185US1. 3/4

PAGE 3/4 * RCVD AT 6/11/2008 7:27:09 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-5/41 * DNIS:2738300 * CSID:8453523194 * DURATION (mm-ss):01-22